

Work Order ID 136720

136720

Page 1

Wednesday, September 02, 2015 2:45:27 PM

Item ID: D3535-13 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Wearplate Fwd
 Start Date: 9/1/2015 Start Qty: 4.00 *4* Cust Item ID:
 Required Date: 9/1/2015 Req'd Qty: 4.00 *4* Customer:
 Reference:

Approvals: Process Plan: MLS Date: SEP 08 2015 Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
 Run Start *NR1*
 Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3535	Rev B								
100	FLOW WATER JET	0.00							
100	Waterjet	0.02							
FLOW CNC Waterjet	Memo 1-Cut as per Dwg D3535 Dwg Rev: <u>B</u> Prog Rev: <u>B</u> 2- Deburr if necessary								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
110	QC	0.00							
Quality Control	Memo								
120	QC8- Inspect parts - second check	0.00							
120	QC	0.00							
Quality Control	Memo								

DAS
38
9-8-
OCT 01 2015
SEP 01 2015
SEP 01 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																
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N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 9/1/2015 **Start Qty:** 4.00 ***4***

Cust Item ID:

Required Date: 9/1/2015 **Req'd Qty:** 4.00 ****A****

Customer:

Reference:

Run Start *NR1*

Approvals: **Process Plan:** **Date:** **Tooling:** **Date:**

Stop ***NR2***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

**Insp.
Stamp**

0.00

130

NC BRAKE

0.00

Brake NC

Memo

Brake NC

1-Form on Brake as per Dwg D3535 using Jigs DT8261 and DT83262-Form
joggle as per Dwg D3535 using Jig DT8158 Identify as D3535-13

DAS
36
9-88

DAS
30
9-89

QC5- Inspect part completeness to step on W/O

0.00

140

0.00

QC

Memo

Quality Control

UAS
38
9-89
OCT 05 2015

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00

150

Memo

0.00

Powdercoat

START TIME: 8:40 OVEN TEMPERATURE: 320
FINISH TIME: 9:15

DAS 34 9-89

DQA: _____ Date: _____



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Required Date: 9/1/2015 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC3- Inspect Part Finish	0.00							DAS
160						(7)			38
QC	Memo	0.00							9-89
Quality Control									OCT 13 2015
170	Identify as per dwg & Stock Location: <u>FP-002</u>	0.00							
170									
Packaging	Memo	0.00							
Packaging	LOCATION : FP002								
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.01							
Quality Control									

MLJ OCT 14 2015

MLJ OCT 14 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

Wednesday, September 02, 2015 2:45:27 PM

Page 1

Work Order ID: 136720

136720

Parent Item: D3535-13

D3535-13

Parent Item Name: Wearplate Fwd

Start Date: 9/1/2015

Required Date: 9/1/2015

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A New Issue 07-02-15 JLM
IPP Rev:B As per Rev B 07-08-31 JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S20GA		Purchased		No		100	sf	346.8623	0.8505	3.581053			

M304S20GA

304/316 .040 Sheet

09/15/19/30

Location

Loc Qty

Loc Code

MAT

22.6

m131700

22.6

MAT020

324.2623

m130345

1.3139

m131060

90.2484

m132387

232.7

6.3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

DART AEROSPACE LTD		Work Order:	1367201
Description: Wearshoe		Part Number:	D3535-13
Inspection Dwg: D3535 Rev: B		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.885	+/-0.010	1.891	/		Vide-01	
2.000	+/-0.010	2.005	/		Vide-02	
5.650	+/-0.010	5.652	/		Tap	
9.150	+/-0.010	9.153	/			
14.066	+/-0.010	14.069	/			
18.983	+/-0.010	18.985	/			
23.900	+/-0.010	23.900	/			
27.400	+/-0.010	27.400	/			
29.400	+/-0.010	29.400	/			
32.900	+/-0.010	32.900	/			
Ø0.188	+0.005/-0.001	Ø.190	/			
20.00	+/-0.030	20.00	/			
14.00	+/-0.030	14.00	/			
8.00	+/-0.030	8.00	/			
5.00	+/-0.030	5.00	/			
0.300	+/-0.010	.303	/			
0.300	+/-0.010	.305	/			
0.038	+/-0.010	.036	/			

DAS

Measured by:	<i>dy</i>	Audited by:	38 9-89	Prototype Approval:	N/A
Date:	15/09/30	Date:	OCT 01 2015	Date:	N/A

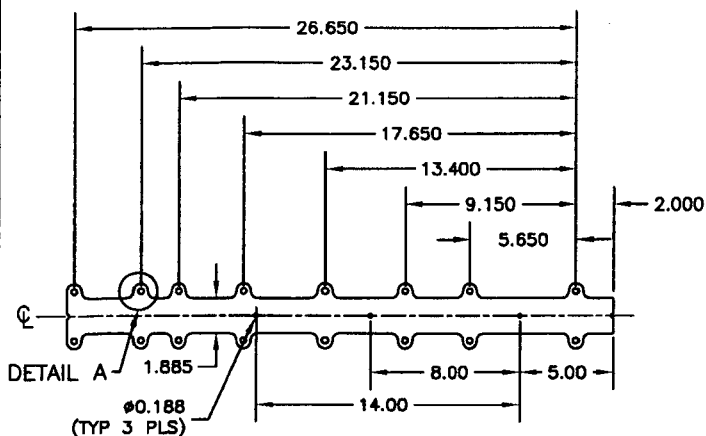
Rev	Date	Change	Revised by	Approved
A	08.04.15	New Issue	KJ/DD <i>dy</i>	<i>dy</i>



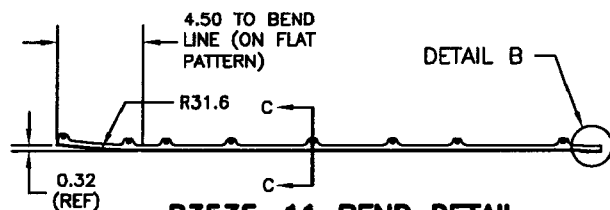
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07.04.24

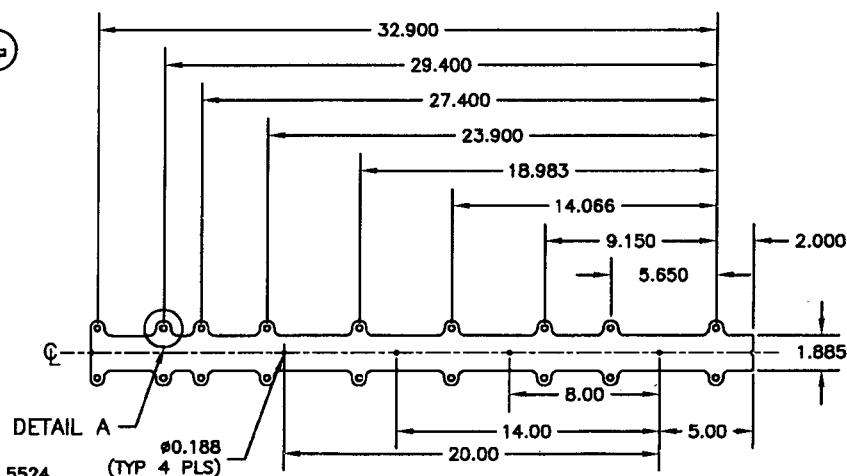
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ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. ~~136720~~ M-5
150908



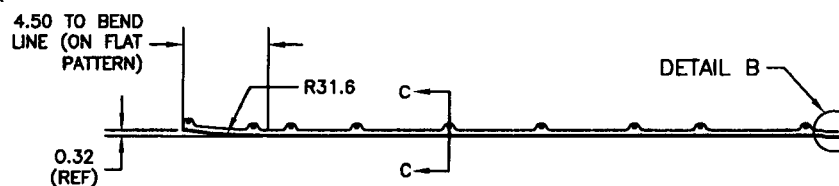
D3535-11F FLAT PATTERN



D3535-11 BEND DETAIL



D3535-13F FLAT PATTERN



D3535-13 BEND DETAIL

NOTES

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 20 GAUGE (0.038 THICK) (REF DART SPEC M304S20GA)
- 2) FINISH: POWDER COAT GREY SANTEX (4.3.5.6) PER QSI 005 4.3
- 3) PART IS SYMMETRICAL ABOUT C
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES TO 0.010 MAX
- 7) IDENTIFY WITH DART P/N USING WHITE FINE POINT PAINT MARKER
- 8) SEE PAGE 7 FOR DETAILS AND SECTION

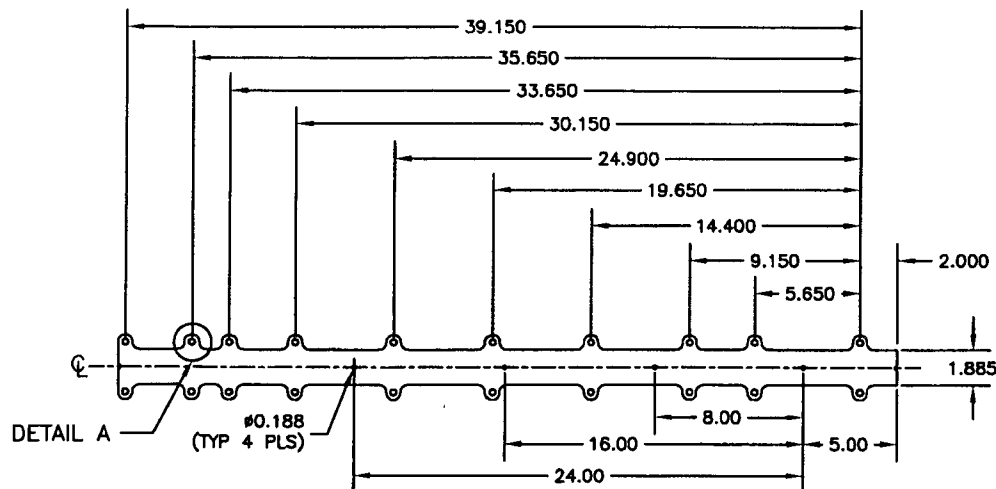
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CB	CH	PORT HADLOCK, WA	
CHECKED	APPROVED	DRAWING NO.	REV. B
		D3535	SHEET 1 OF 7
DATE		TITLE	SCALE
07.04.17		WEARSHOE	1:10
A	06.10.25	NEW ISSUE	
B	07.04.17	MOVE TAB OUTBOARD, ADD AMS SPEC	



RELEASED

07.04.24

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CHECKED	APPROVED	DRAWING NO.	REV. B
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DATE	TITLE	SCALE	
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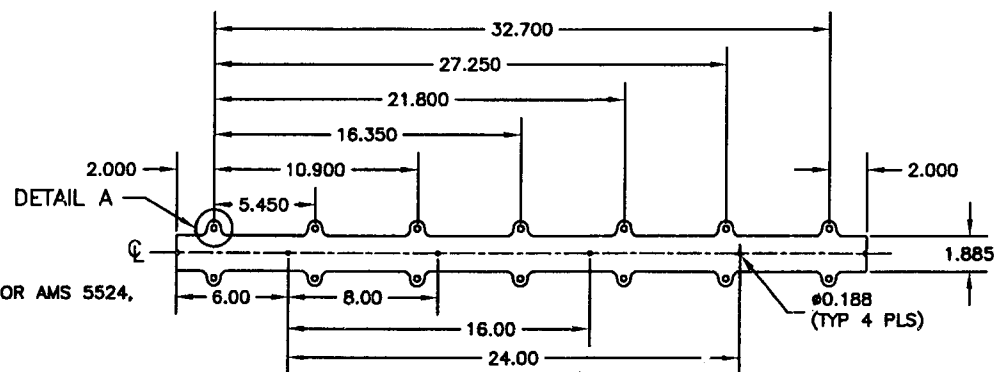


4.50 TO BEND
LINE (ON FLAT
PATTERN)

D3535-15F FLAT PATTERN

0.32
(REF)

D3535-15 BEND DETAIL



D3535-21F FLAT PATTERN

D3535-21 BEND DETAIL

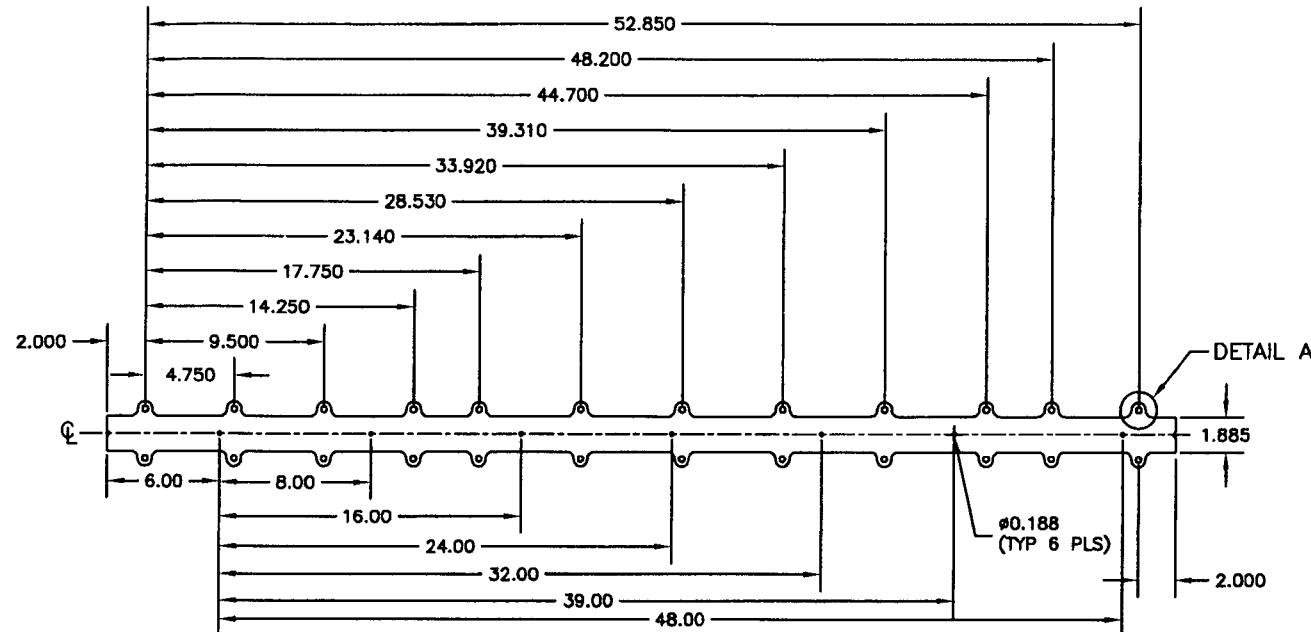
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- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 20 GAUGE (0.038 THICK) (REF DART SPEC M304S20GA)
- 2) FINISH: POWDER COAT GREY SANDTEX (4.3.5.6) PER QSI 005 4.3
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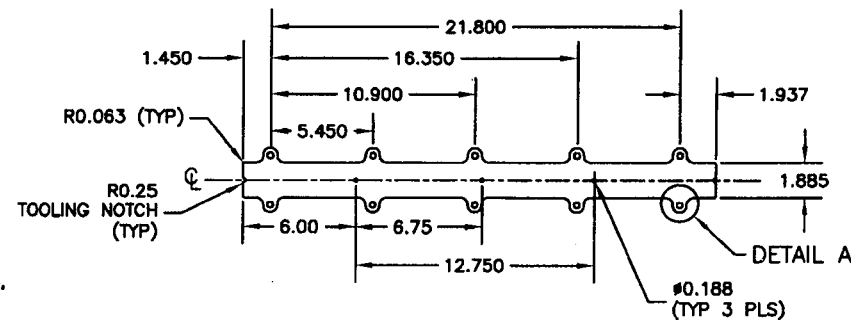
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CHECKED		APPROVED		PORT HADLOCK, WA
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		SCALE	1:10	
		SHEET 3 OF 7		
		REV. B		



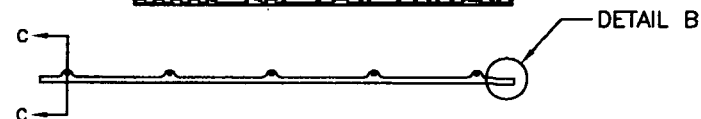
D3535-23F FLAT PATTERN



D3535-23 BEND DETAIL



D3535-25F FLAT PATTERN



D3535-25 BEND DETAIL

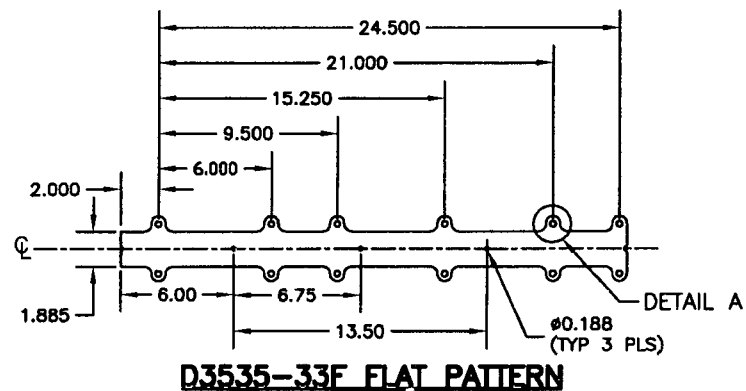
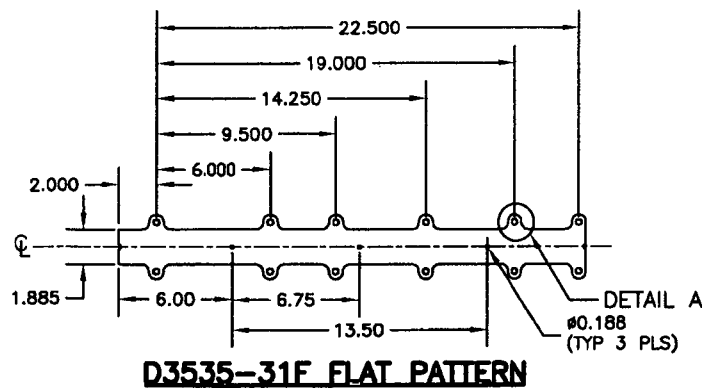
C0123

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 20 GAUGE (0.038 THICK) (REF DART SPEC M304S20GA)
- 2) FINISH: POWDER COAT GREY SANDTEX (4.3.5.6) PER QSI 005 4.3
- 3) PART IS SYMMETRICAL ABOUT ϕ
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
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- 7) IDENTIFY WITH DART P/N USING WHITE FINE POINT PAINT MARKER
- 8) SEE PAGE 7 FOR DETAILS AND SECTION



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DATE	TITLE	SCALE	
07.04.17	WEARSHOE	1:10	



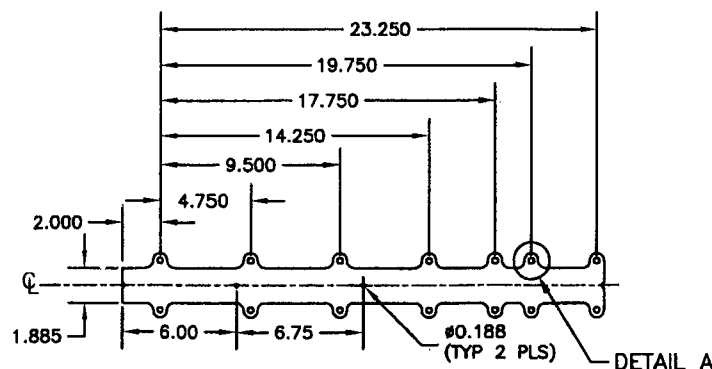
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(REF DART SPEC M304S20GA)
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07.04.17

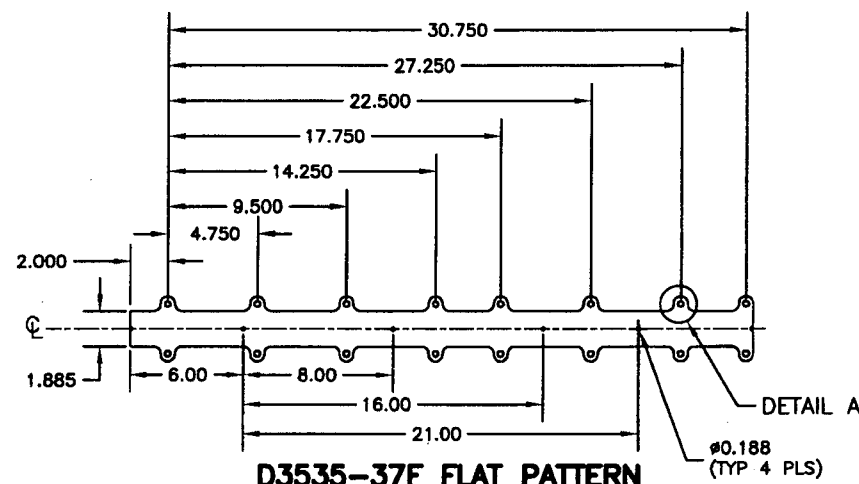
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CHECKED 	APPROVED 	DRAWING NO. D3535	REV. B
DATE 07.04.17	TITLE WEARSHOE	SHEET 5 OF 7	SCALE 1:10



D3535-35F FLAT PATTERN



D3535-35 BEND DETAIL



D3535-37F FLAT PATTERN



D3535-37 BEND DETAIL

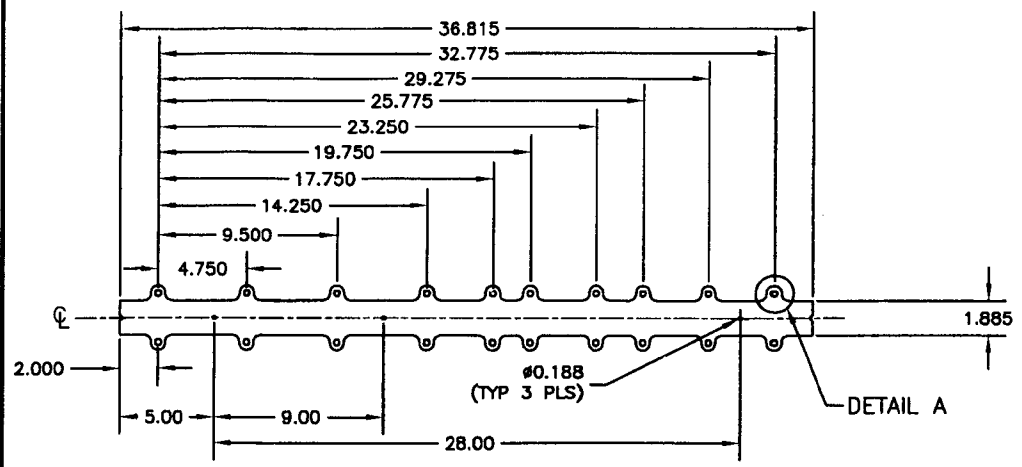
NOTES

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 20 GAUGE (0.038 THICK) (REF DART SPEC M304S20GA)
- 2) FINISH: POWDER COAT GREY SANDTEX (4.3.5.6) PER QSI 005 4.3
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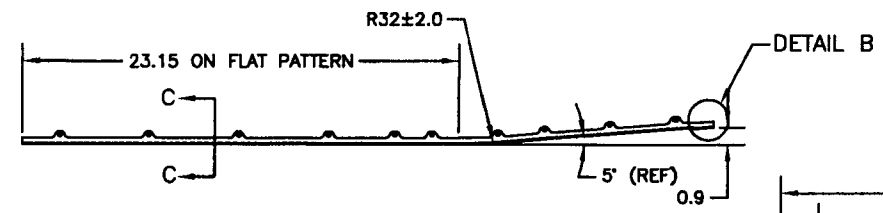


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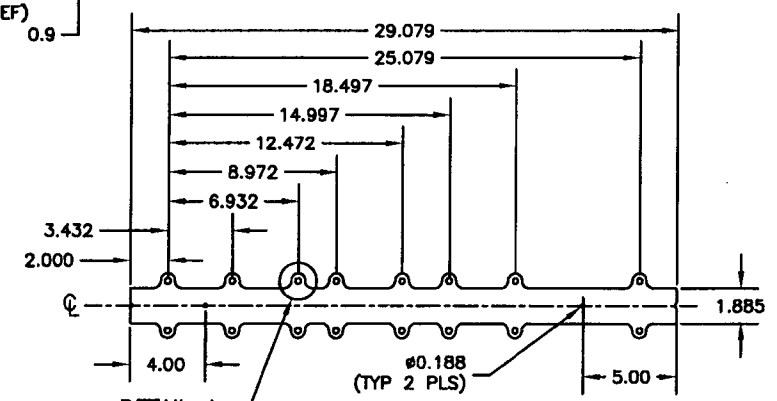
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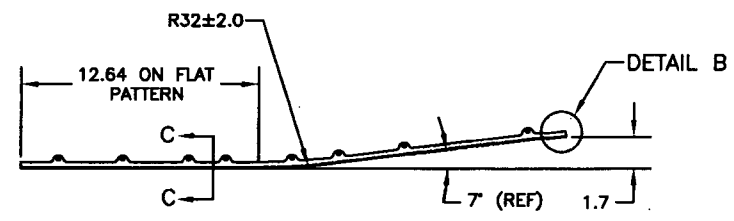
D3535-39F FLAT PATTERN



D3535-39 BEND DETAIL



D3535-41F FLAT PATTERN



D3535-41 BEND DETAIL

- NOTES**
- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 20 GAUGE (0.038 THICK) (REF DART SPEC M304S20GA)
 - 2) FINISH: POWDER COAT GREY SANTEX (4.3.5.6) PER QSI 005 4.3
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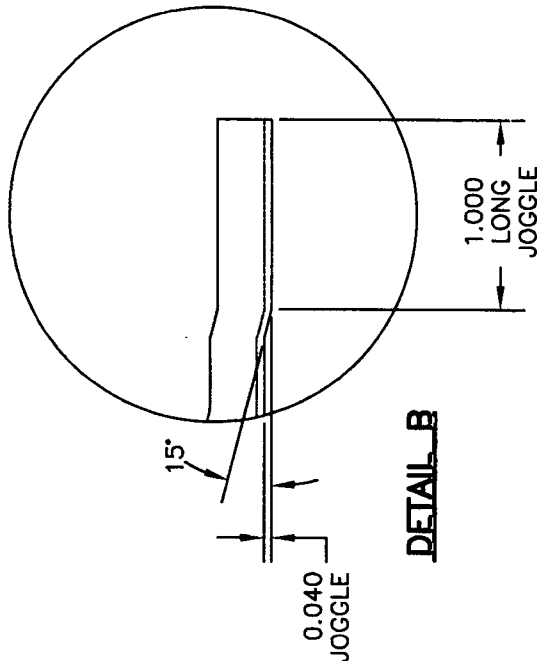
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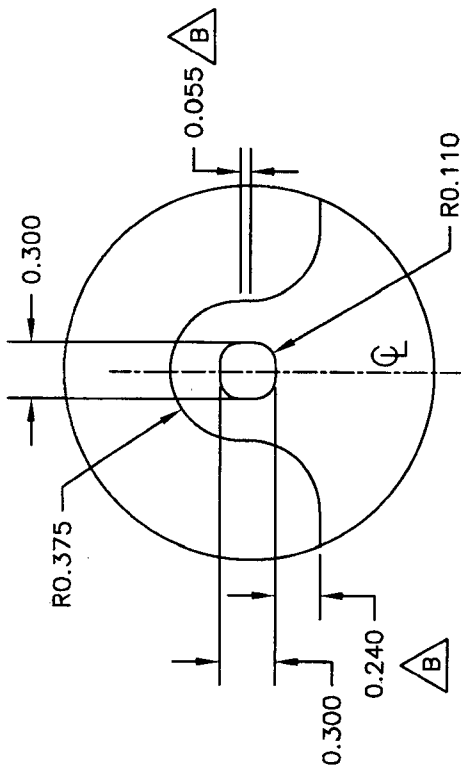
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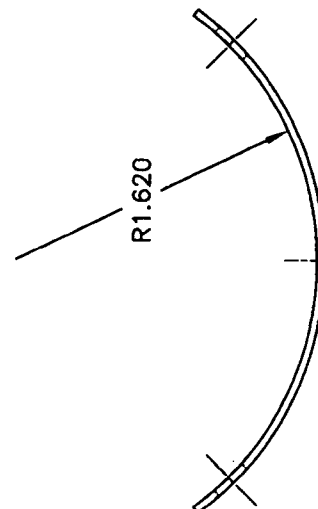
07.04.24



DETAIL B



DETAIL A



SECTION C-C

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